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ABSTRACT

To assure continuing internal organizational accountability and to promote external communication and idea adoption, Outward Bound began in 1973 on ongoing procedure whereby its affective objectives were identified, analyzed, and evaluated. In a workshop situation teachers initially identified 3 to 6 major affective objectives; these, then, were subdivided into sub-goals, which created a large list. Employing successive approximation the list was first tested via actual course work during the summer of 1973. Testing was accomplished via a checklist system wherein individual behavior was recorded by a student, instructor, or senior instructor. Data were then summarized and evaluated statistically for purposes of measuring course effectiveness and establishing trends. Though different objectives were and are projected for different courses, it is hoped that ultimately various objectives and programs will be tied together in a common hierarchy. In other words, Outward Bound is evolving its objectives in a series of empirically checked steps. It is estimated that it will take two more years to develop basic checklists that fairly and effectively measure affective behavior change in a field setting which will involve both field tests where the checklist items are evaluated and workshops where the items are revised on the basis of field experience. (JC)

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THE MEASUREMENT OF AFFECTIVE EDUCATION

A Report of Recent Work by Outward Bound
Prepared for the Conference on Outdoor Pursuits
in Higher Education

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February 1974

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1. INTRODUCTION

For slightly over a year Outward Bound has been engaged in an effort to specify its educational objectives and to measure the behavioral changes induced by an Outward Bound course. We expect this effort to become an ongoing part of Outward Bound. During this early stage special attention has been given to the identification and measurement of affective behavior change. This report will discuss our activities and results to date.

Before proceding to discuss instruction objectives, it is worthwhile making some distinctions. In preparing to evaluate any program, three general types of questions can be asked:

(1) Should the program exist in the first place. In other words, in an education context, we ask if we want to teach this general subject matter to students.

(2) If we decide we want to teach a general subject matter to students, then we must ask exactly what specific context is to be included in our course.

(3) Finally, we must ask ourselves if we are actually succeeding in teaching the specific context we set out to teach.

To put these questions in concrete form, we might ask:

(1) Should high school students be taught Latin?

(2) If we decide they should, then we must decide exactly what the specific objectives of our Latin instruction should be. Should they learn to speak it, or just read it, etc.,?

(3) Finally, we should determine how we will decide if we have succeeded in accomplishing what we set out to do in (2) above.

If we were to give names to the processes by which we answer these three questions, we might say that (1) was concerned with

determining the value of a program; (2) was concerned with determining the instructional objectives of a program, and that (3) was concerned with measuring the instructional effectiveness of a program.

This paper will address the second and third questions relative to the traditional Outward Bound course. It will not address question one which is perhaps more philosophical than technical in nature.

Perhaps, in addition to distinguishing the specific sort of questions this paper will address, we should suggest why Outward Bound decided to make the considerable effort to answer these questions in the first place. Outward Bound has, after all, been in existence since World War II. It has run numerous courses and is satisfied that its courses are worthwhile. During all that time Outward Bound has not previously attempted to explicitly specify its instructional objectives or measure its results. You may reasonably wonder why it has decided to do so now. Basically the answer is twofold. As some of the Outward Bound schools have become larger they have felt a need for "quality control." When the schools were smaller and instructor turnover was very low, new instructors could be initiated into the Outward Bound philosophy and techniques on a very personal, practically apprenticeship-type basis. As the schools have become large and more diverse, however, some have felt a need to be able to tell new instructors about Outward Bound techniques and goals in a more precise and explicit fashion.

Secondly, the Outward Bound idea has spread from the standard Outward Bound course to various other programs and contexts -- of which college-related Outward Bound type programs are good examples. As this outreach has occurred there has been a need to explain Outward Bound goals in a more abstract or theoretical way -- independent of the specific context of the standard Outward Bound course. Further, as Outward Bound has offered its philosophy and techniques to others, it has been challenged to prove its claims.

Thus, to both assure continuing internal organizational accountability and to promote the external communication and adoption of its ideas, Outward Bound is making a serious effort to precisely specify its instructional objectives and to measure their attainment.

2. INSTRUCTIONAL OBJECTIVES

Instructional objectives have been increasingly popular in educational circles since the early 1950's. Perhaps the book that made instructional objectives a "household world" was Robert Mager's book Preparing Instructional Objectives, published in 1962. In that book Mager defined the function of a good instructional objective as follows:

(1) It should describe what the learner will do to demonstrate that he has acquired a desired behavior.

(2) It should describe the conditions under which the learner must demonstrate the behavior, and

(3) It should state the standards of behavior expected of the learner. In other words, it should tell us how to discriminate between an acceptable and an unacceptable performance of the desired behavior.

Mager went on to say that the writer of instructional objectives should employ specific action verbs that preclude misinterpretation and provide sufficient detail to assure that other qualified persons in the field can recognize the behavior.

In practice, instructional objectives usually refer to a class of behavior. We refer to the specific item by which we measure a behavior as a criterion item or a test item.

For example an instructional objective might be:

The student will be able to add columns of four digit numbers.

A criterion item for this instructional objective might be:

Add	2345	1452
	4713	8411
	6855	9875
	+3521	+6310

(Correct Answer 17,443 and 26,058.)

The instructional objective states the general type of behavior the student must display to prove he has mastered the course of study. The criterion item specifies the exact behavior the student must perform if we are to be assured that he has mastered the instructional objective in question. (Note that the "answer" must be specified so any outside observer can easily determine if the student got the criterion item right or not).

At about the same time that Mager was popularizing instructional objectives, Bloom, Krathwohl and others came up with a three part division of all instructional objectives. They proposed that all objectives be classified as either cognitive, affective or psychomotor objectives.

Cognitive objectives are objectives concerned with intellectual knowledge, including facts, analytic skills, and problem-solving skills.

Affective objectives are objectives concerned with attitudes and feelings and include attention, valueing and intrinsic ethical motivation.

Psychomotor objectives are objectives concerned with physical performance including coordination and skilled body movement.

Obviously no real learning experience can ever be neatly divided into one of the three categories. Some situations are clearly borderline cases; for example, when we explain in cognitive terms how pollution occurs and hope that the learners will make personal

changes in the way they act (attitude) based on the information we have given them. Some learning experiences, however, are so predominantly academic, physical, or affective that the categories remain useful. (See Figure 1)

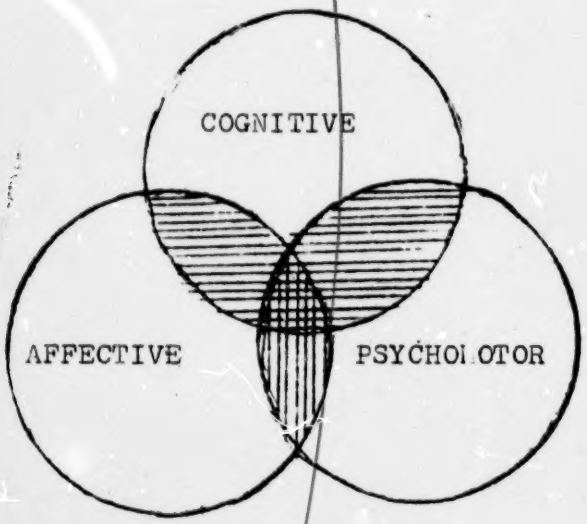


Figure 1.

Most schools have made considerable progress in elaborating their cognitive objectives. The typical teacher, by means of tests and so forth, can give you a pretty accurate idea of the facts and problem-solving skills they want their students to have mastered by the end of the course.

Outward Bound has for several years, for example, had a very detailed instructional syllabus in safety and map and compass work.

Hardly any instructional institution, however, goes beyond some minimal statement concerning its interest in teaching its students in the affective area.

3. IDENTIFYING THE AFFECTIVE OBJECTIVES OF OUTWARD BOUND

Outward Bound has been offering courses for many years; it is an established institution. Even though they had never been specified, every Outward Bound instructor was confident that he knew the major goals of the standard Outward Bound course. Thus, the task we face is helping an ongoing institution identify and formalize its goals.

Our strategy has been to gather Outward Bound personnel together in workshops and ask them to identify their own goals. In structuring these workshops we have used two general approaches. First, we have started from the top and worked down. Thus, for example, we begin by agreeing that Outward Bound has three general classes of objectives: cognitive, affective and psychomotor. Then we try to break out the three to six major cognitive goals Outward Bound has. Likewise we break affective and psychomotor into three to six major headings. Then we zero in on the affective area and try to sub-divide each of the major affective goals into its sub-goals. Through a series of sub-divisions we finally arrive at a rather large list of affective objectives and criterion items.

The second approach we have depended upon is successive approximation; we don't demand final results the first time. When we first began the process of specifying objectives we agreed that the development of a really good set of affective objectives would take three years. We developed an initial list the first year, then tested it during actual courses in the summer of 1973.

Since then we have revised and refined the list and are currently testing it again in winter and spring courses. This gradual approach is based on two ideas. First, if we demanded highly polished objectives on the first try, workshop participants simply wouldn't be able to produce them -- it takes time to learn how to state a precise and measurable objective. If we want the Outward Bound staff, and not an outside consultant, to establish the objectives, we must allow enough time for the staff to learn how to do it. Second, every staff member has "pet" objectives -- things he is or wants to be teaching -- things that some other staff members don't really think can be taught. If we finalized Outward Bound's objectives in one workshop, we would have to decide what to include or exclude on a non-empirical basis. By allowing enough time for field testing between workshops, different staff members can prove to themselves whether or not certain objectives can really be taught and measured before having to make a decision on whether or not to include that objective in the final list of objectives.

In other words, Outward Bound is evolving its objectives in a series of empirically checked steps. After each round of course work where they try to apply objective checklists, Outward Bound staff members return to workshops much more sophisticated in the practical problems of affective measurements.

In developing our hierarchy of objectives (see Appendix A) we have tried to be as inclusive as possible. We have asked ourselves what the affective goals and objectives of any possible Outward Bound experience might be. In doing this we have hoped we could develop a common framework for all of the different

programs that might be conducted by Outward Bound, or similar institutions such as high schools or colleges.

Naturally enough, the effect of the Standard Outward Bound course has limited our scope and other people from other programs will no doubt see places where the hierarchy should be expanded.

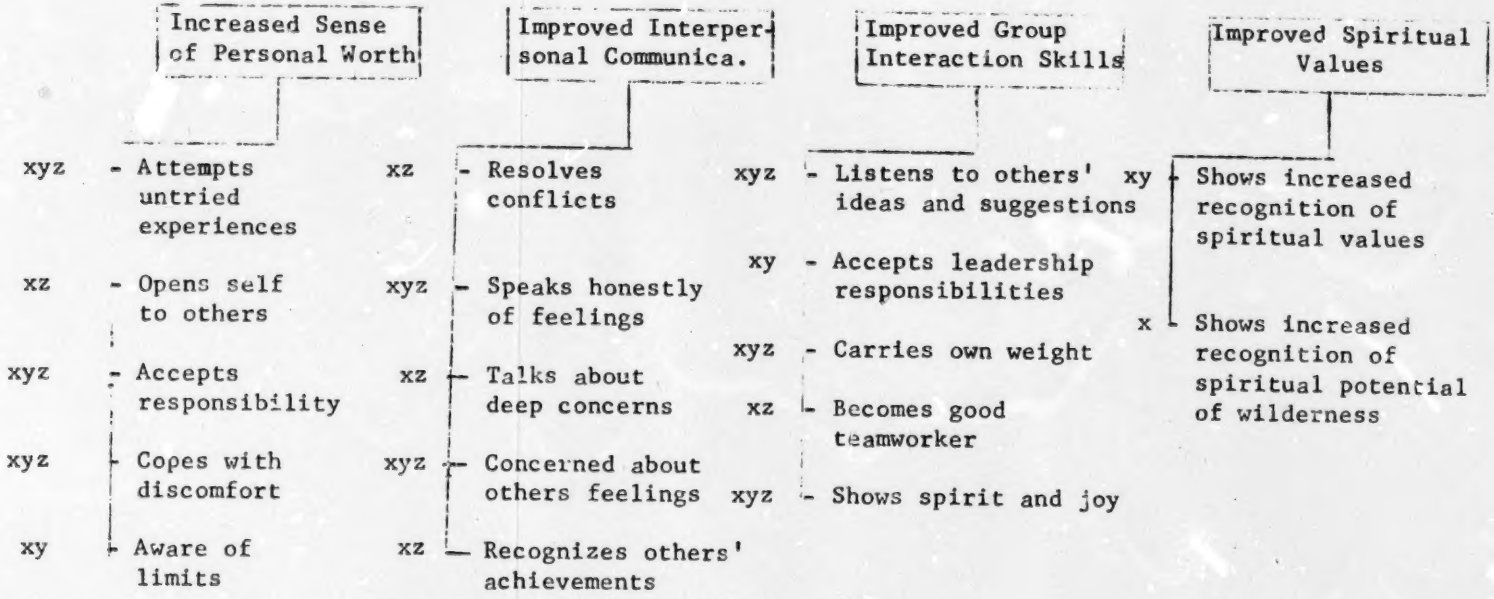
In specifying specific objectives and developing checklists, however, we have considered only the standard Outward Bound course. We do not expect that these checklists, without considerable revision, could be used in non-Outward Bound courses. Not only would different programs want their own specific objectives, but perhaps even more importantly, they would want the experience and consequent commitment arising from developing their own objectives.

Even within the Outward Bound organization we always expect to have different objectives for different programs. We do hope, however, that the various objectives and programs will be tied together within a common hierarchy. (See Figure 2). This should make it much easier on instructors who are asked to switch from one specific program to another.

There are two big problems associated with the development of affective objectives and criterion items.

First, we must decide what specific, observable behaviors may reasonably be taken as an outward sign of an inner attitude. This problem becomes even more complex when we try to pick specific behaviors that we can observe in the context of a 21 day Outward Bound course, that will reflect attitudes that the students will

OUTWARD BOUND AFFECTIVE OBJECTIVES HEIRARCHY


Increased Sense of Personal Worth
Improved Interpersonal Communica.
Improved Group Interaction Skills
Improved Spiritual Values
xyz - Attempts untried experiences
xz - Opens self to others
xyz - Accepts responsibility
xyz - Copes with discomfort
xy - Aware of limits
xz - Resolves conflicts
xyz - Speaks honestly of feelings
xz - Talks about deep concerns
xyz - Concerned about others feelings
xz - Recognizes others' achievements
xyz - Listens to others' ideas and suggestions
xy - Accepts leadership responsibilities
xyz - Carries own weight
xz - Becomes good teamworker
xyz - Shows spirit and joy
xy - Shows increased recognition of spiritual values
x - Shows increased recognition of spiritual potential of wilderness

Traditional 21-day OUTWARD BOUND course (may have 35 objectives)	Special OUTWARD BOUND 5-day Management Course (may have 9 objectives)	OUTWARD BOUND-directed one-semester H.S. Course (may have 105 objectives)

Figure 2: Hypothetical Example of how the Heirarchy can Provide a Structure for Several Different Programs

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later display in entirely different contexts in the situations they find themselves after the return from Outward Bound.

Both problems exist in all other areas of education, of course. The mathematics teacher must always wonder if the student who successfully solves the addition problems he gives him would be able to solve other addition problems that he could give him. Further, he must also wonder whether the student will be able to generalize his rather specific knowledge of addition to different contexts such as solving chemistry problems or filling out his income tax form. However, even though the problems of accuracy of sample and generalization exist in all subject matters, they are especially acute in the affective area.

If we are going to try to measure affective behavior changes in innividual students these problems would prove insurmountable. If, however, as in the case with Outward Bound, we are only interested in measuring average trends, we can solve these problems by applying lots of common sense and consensus.

No one would be prepared to say with any confidence that just because a single student picked up a piece of paper during a hike that he had become more environmentally aware. We can imagine other reasons why he might have picked up the paper. If, however, at the beginning of a course 30 students ignore litter and by the end of the 21 day course most students stop to pick up litter, most observers feel confident that some degree of environmental awareness -- at least relative to litter -- has been taught.

A second problem associated with developing criterion items is the terrifically practical problem of measuring the behavior in the field. Even using checklists that make the recording of behavior pretty easy, how much can an instructor really observe in a wilderness setting with several students all doing different things at the same time. We have already discarded several items that we would like to measure simply because we realized that there was no realistic way to observe enough instances of behavior on which to base a judgment. No doubt others will be discarded in the future for this same reason. Again, the fact that we are concerned with averaged group trends and not individual evaluation, saves us. We wouldn't want to evaluate an individual on the basis of one behavioral event. But if on one patrol, six of eight individuals show a specific sign of group cooperation while in another patrol only one individual shows any sign of group cooperation, we can begin to make some tentative judgments.

4. MEASURING AFFECTIVE OBJECTIVE ATTAINMENT

It's one thing to specify objectives and it's another thing to actually measure their attainment. In traditional classrooms there is the final examination. It's accepted as part of a traditional course and it can do a relatively good job of measuring cognitive achievements. It's difficult to measure affective behavior change with a paper and pencil test, however. And in any case, students taking the standard Outward Bound course, neither expect nor desire to take a "final exam" at the end of their course.

We've spent a considerable amount of time on this question in workshops and have yet to arrive at a completely satisfactory answer. At the moment we are relying mostly on checklists. The observer, be he the student, instructor, or senior instructor, uses the checklist to quickly run through a list of behaviors and determine whether or not the student is displaying that behavior. (Examples of these checklists are included in the Appendices B and C.)

We should make it very clear that in measuring affective behavior change we are <u>not</u> interested in evaluating individual students. We are only interested in evaluating the overall effectiveness of a course. To measure the effectiveness of a course we gather raw data on individual student changes during the course. Then we summarize that data and evaluate it statistically. We are interested

in averaged trends in courses -- not individual successes or failures.

We know as a practical matter that we will get better averaged data if each instructor evaluates behavior changes in each individual student separately. The large number of separate evaluations will tend to "wash out" the effect of a few students who do very well or who do very poorly. If the instructor is asked to report only on the average behavior change of an entire group he will tend to allow exceptional students to bias his evaluation.

So far, perhaps because we've tried to keep the checklists very simple and straightforward, the instructors have not found filling them out to be too much of a burden. Since we are interested in change during a course we have been using the checklists twice, once near the beginning of the course to establish baseline data, and once again at the end of the course to document how students are doing at the end of the 21 day period. Obviously, the averaged difference between these two sets of data represents the change that occurred during the Outward Bound course.

In our workshops, especially those held after the instructors have tried the checklists out in the field, we have stressed the identification of "critical behaviors." We want to try to reduce the number of items on the checklists. We would like to identify very specific, easily observed behaviors that we can all agree are signs of specific attitudes (at least when they occur in specific contexts). In other words we want to replace quantity of observation with quality. Some progress has been made, and no

doubt much more will be made as instructors spend more time using the checklists and learning just what affective behaviors they really can observe accurately in a field setting. It is this refinement of objectives and criterion items and not the general development of the hierarchy that will take Outward Bound the full three years we have allotted to perfecting our checklists as valid instruments.

It is worth noting, that Outward Bound instructors are very resistant to individual student evaluation, but are quite willing to gather individual data when they understand it will be averaged and used to evaluate the course.

5. MAKING AFFECTIVE EVALUATION AN ONGOING PART OF OUTWARD BOUND

As noted earlier, Outward Bound recognizes that a serious affective evaluation effort will be a long-term effort. We estimate that it will take two more years just to develop basic checklists that can fairly and effectively measure affective behavior change in a field setting. These two years will involve both field tests where the checklist items are evaluated and workshops where the items are revised on the basis of the field experiences.

There are many things we can do with the evaluation data, but only when everyone concerned trusts the data. By 1975 we hope to have developed a set of checklists which accurately measure affective behavior change on a standard Outward Bound course.

We will then be in a position to try to accurately evaluate particular course elements to determine their effect on the total course. For example, we might increase or decrease the current three day solo experience and see if that resulted in changes in different affective components. Until we have a standard to measure against, however, we are unable to rationally resolve disagreements concerning instructional strategy and technique. An additional benefit we expect to derive from accurate course evaluation is more accurate and effective instructor counseling. We expect senior instructors to use the evaluation data to help new instructors pinpoint specific parts of their courses that require improvement.

In a longer future we hope to develop instructor accountability and management by objective systems appropriate to the Outward Bound process. And, of course, Outward Bound obviously hopes that it will be able to contribute what it learns to other institutions thereby increasing the quantity and quality of experimental affective instruction throughout the various educational levels and institutions of the United States.

In fact, although no one trusts the checklist data yet, some benefits have already been observed. Just getting people to talk about affective change in terms of more or less concrete behavioral objectives raises every instructor's consciousness of any such behavior occurring during one of his courses. One could almost suggest that providing the instructors with a more precise language has increased their ability to discriminate and communicate affective changes. And no matter how inaccurate the current checklists are, to provide the instructor with some topics to discuss when counseling students that he might have otherwise omitted.

Outward Bound has always been especially concerned with educating the whole person -- and this has always included a significant concern with such affective behavior changes as increased self-confidence, increased group interaction skills, and a deep concern for spiritual values. Our recent efforts at specifying objectives and evaluating specific affective behavior change is fully within the Outward Bound tradition. It has, if you would, given us a precise language to use in describing what we are trying to do, and at the same time intensified the day-to-day discussion of

affective matters among Outward Bound personnel. We believe it will also improve our ability to assist others to analyze, design and conduct and evaluate experimental programs in non-Outward Bound contexts.

APPENDIX A

FIRST DRAFT OF A HIERARCHY OF INSTRUCTIONAL OBJECTIVES DEVELOPED BY OUTWARD BOUND

- 1973 -

OUTWARD BOUND

INSTRUCTIONAL OBJECTIVES

The following instructional objectives were identified at the National Outward Bound School and Program Director's Meeting in Texas in November of 1973.

OVERVIEW:

1. AFFECTIVE OBJECTIVES - Improvement in Attitudes and Values

   1.1 Increased Sense of Personal Worth and Self-Confidence.
   1.2 Improved Interpersonal Communications (one to one).
   1.3 Improved Group Interaction Skills (crew of watch, level)
   1.4 Improved Social Attitudes (attitudes towards society and unknown strangers).
   1.5 Improved Spiritual, Moral and Ethical Values.
   1.6 Increased Environmental Awareness.

2. COGNITIVE OBJECTIVES - Improvements in Intellectual Knowledge and Skills.

   2.1 Improved Knowledge of First Aid.
   2.2 Improved Knowledge of Map and Compass.
   2.3 Improved Knowledge of Wilderness Environment.
   2.4 Improved Knowledge of Group Interaction Processes.

3. PSYCHOMOTOR OBJECTIVES - Improvements in Physical Fitness and Skill.

   3.1 Increased Physical Adaption to Outdoor Living.
   3.2 Increased Backpacking Skills.
   3.3 Increased Mountaineering Skills.
   3.4 Increased River Rafting Skills.
   3.5 Increased Seamanship Skills.

DETAILED LIST OF OBJECTIVES:

1. AFFECTIVE OBJECTIVES - Improvements in Attitudes and Values

1.1 Increased Sense of Personal Worth and Self-Confidence.

1.1.1 Student becomes more willing to attempt untried experiences.

1.1.1.1 Does student willingly attempt previously untried experiences?
1.1.1.2 Does student willingly extend himself into new situations?

1.1.2 Student becomes more willing to open self to others.

1.1.2.1 Does student share his past?
1.1.2.2 Does student share his feelings and experiences of the course?
1.1.2.3 Does student willingly express his opinion?
1.1.2.4 Does student willingly express his emotions?
1.1.2.5 Does student seem open to making friends?
1.1.2.6 Does student laugh at himself?

1.1.3 Student becomes more willing to accept responsibility for own actions.

1.1.3.1 Does student participate in decision-making process?
1.1.3.2 Does student accept leadership and responsibility?
1.1.3.3 Does student look after his own safety and well being?
1.1.3.4 Does student accept responsibility for his own actions?
1.1.3.5 Does student willingly admit mistakes?

1.1.4 Student becomes more willing to cope with discomfort and stress.

1.1.4.1 Does the student make the most of difficult situations?
1.1.4.2 Is the student cheerful in adversity?

1.1.5 Student becomes more aware of limits of personal abilities.

1.1.5.1 Does student guage physical abilities and limitations realistically?
1.1.5.2 Is student aware of his emotional self?

1.2 Improved Interpersonal Communications
(one to one interactions)

1.2.1 Student tries to resolve conflicts with others.

1.2.2 Student tries to speak honestly of his/her feelings.

1.2.3 Student spends time talking with others about things that deeply concern him/her.

1.2.4 Student shows concern about another's feelings.

1.2.5 Student is willing to try another's ideas and/or adopt their plan of action.

1.2.6 Student willingly recognizes other's achievements.

1.3 Improved Group Interaction Skills
(crew or, watch, or patrol interactions)

1.3.1 Student becomes more open: Student shows more willingness to listen and try other's ideas and solutions.

1.3.1.1 Is student honest and open in his relationship to members of the group?
1.3.1.2 Does the student listen to other points of view?

1.3.2 Student shows increasing willingness to accept responsibilities of leadership.

1.3.2.1 Does student accept responsibility in daily appointed tasks?
1.3.2.2 Is student willing to accept group elected leadership roles?
1.3.2.3 Is student willing to accept leadership in task oriented roles (e.g., initiative tests, simulated first aid problems.)

1.3.3 Student shows increasing willingness to carry own weight and to do mundane tasks.

1.3.3.1 Does student participate in completing mundane tasks (e.g., food preparation, fire building, loading and unloading gear).

1.3.4 Student becomes increasingly involved in the group process, in decision-making and in problem solving.

1.5.1.4 Does the student show empathy and compassion for fellow student regardless of their sex, religion, or race?

1.5.1.5 Does the student speak or write in journal about men being more alike than different; about all people having common hopes and fears?

1.5.1.6 Does the student seem willing and comfortable discussing problems on a spiritual moral or ethical level.

1.5.1.7 Does the student seem willing to undertake samaritan service?

1.5.2 Student shows increased recognition of the spiritual potential of the wilderness.

1.5.2.2 Does student speak or write in journal about the wilderness as a spiritual experience?

1.6 Increased Environmental Awareness

1.6.1 Students show increased environmental responsibility.

1.6.1.1 Does student practice personal hygeine in an environmentally acceptable manner?

1.6.1.2 Does student willingly carry out everything he brought in?

1.6.1.3 Does student willingly pick up litter?

1.6.1.4 Does student make an effort to leave his campsite as natural as possible?

1.6.2 Students show increased environmental awareness.

1.6.2.1 Does student ask questions about the environment?

1.6.2.2 Does student show a recognition of the interrelationship between the environment (including weather and terrain) and course activities?

1.6.2.3 Does student show a reverance for living things? (e.g., Student refrains from needless destruction of plant or animal life.)

2. COGNITIVE OBJECTIVES - Improvements in Intellectual Knowledge and Skills.

(No sub-system or specific objectives and no criterion items developed).

2.1 Improved Knowledge of First Aid

2.2 Improved Knowledge of Map and Compass

2.3 Improved Knowledge of Wilderness Environment

3. PSYCHOMOTOR OBJECTIVES - Improvements in Physical Fitness and Skill.

(No sub-system or specific objectives and no criterion items developed).

3.1 Increased Physical Adaption to Outdoor Living

3.2 Increased Backpacking Skills

3.3 Increased Mountaineering Skills*

3.4 Increased River Rafting Skills*

3.5 Increased Seamanship Skills*

(*These will vary by school)

APPENDIX B

COURSE DIRECTOR'S COURSE EVALUATION CHECKLIST USED BY COLORADO OUTWARD BOUND SCHOOL

- 1973 -

OUTWARD BOUND

COURSE DIRECTOR'S COURSE EVALUATION

CHECKLIST

Course # _____ Instructor _____

Date _____

Outward Bound attempts to provide students with a chance to change and grow during their Outward Bound course. The following list identifies some of the changes Outward Bound hopes to make in participating students. Obviously, change is relative to student's entering behavior -- there isn't a set goal for students to reach, instead, it is our goal to move them from where they are as far as we can. This checklist should be used by course directors and senior staff members during visits to courses. The objective of this checklist is to focus your observations and your consequent discussions with the course instructor on the course's overall progress in achieving the following instructional objectives.

On one visit you obviously can't see or measure real progress toward achieving these objectives; all you can reasonably do is to check if the instructor and students are conscious of these goals and seem to be involved in activities that will result in the average student making progress relative to the following criterion items.

Put the appropriate number in the column opposite the criterion item.

0. Students don't seem to be involved in this.

1. Only a few students show some progress in this.

2. Many students show much progress in this.

3. Most students show considerable progress in this.

INSTRUCTIONAL OBJECTIVES AND CRITERION ITEMS	
ATTITUDES AND VALUES	
1. Sense of Personal Worth and Self-Confidence	
1.1 Student willingly tries new experiences	
1.2 Student shares his feelings and experiences of the course	
1.3 Student seeks to make new friends	
1.4 Student can laugh at self	
1.5 Student participates in decision-making processes	
1.6 Student accepts leadership responsibility	
1.7 Student willingly admits own mistakes	
1.8 Student makes most of difficult situations	
1.9 Student guages physical abilities and limitations realistically	
1.10 Student is aware of emotional self	
2. Interpersonal Communication (one-to-one interactions)	
2.1 Student tries to resolve conflicts with others	
2.2 Student tries to speak honestly of his/her feelings	
2.3 Student spends time talking with others about things that deeply concern him/her.	

OBJECTIVES AND CRITERION ITEMS	
2. (Continued)	
2.6 Student willingly recognizes other's achievements	
3. Group Interaction Skills (crew, watch, or patrol interaction)	
3.1 Student accepts responsibility for daily appointed tasks	
3.2 Student helps other members for good of team	
3.3 Student allows others a chance to lead and student is a good follower	
3.4 Student has fun, laughs, smiles and generally shows he or she enjoys being part of group	
4. Social Attitudes	
4.1 Student speaks of groups' responsibilities to others.	
4.2 Student willingly participates in a service project if offered chance	
5. Spiritual, Moral and Ethical Values	
5.1 Student speaks of spiritual, moral or ethical principles when trying to explain his action or persuade others of his point of view.	
5.2 Student discusses situations within the perspective of universal or general human values	
5.3 Student shows empathy and compassion for others regardless of their sex, race or religion	
5.4 Student does not seem embarrassed to discuss problems on a spiritual, moral, or ethical level.	
5.5 Student takes time to observe surroundings on a meditative or thoughtful way.	

OBJECTIVES AND CRITERION ITEMS	
5. (Continued) 5.6 Student speaks (or writes in journal) of the wilderness as a spiritual experience	
6. Environmental Awareness 6.1 Student willingly practices personal hygiene in an environmentally acceptable manner.	
6.2 Student willingly carries out everything he or she brought in.	
6.3 Student willingly picks up others' litter so as to leave environment as natural as possible.	
6.4 Student speaks (or writes in journal) of interrelationships of man and nature.	
6.5 Student shows a reverence for living things (by refraining from needless destruction of plant or animal life).	
KNOWLEDGE AND SKILLS 7. Student shows knowledge of first aid	
8. Student shows knowledge of map and compass	
9. Student shows knowledge of wilderness environment	
10. Student shows knowledge of group interaction processes	
PHYSICAL FITNESS AND SKILL 11. Student shows increased overall physical fitness	
12. Student shows increased physical adaption to outdoor living	
13. Student shows increased backpacking skills	

PHYSICAL FITNESS AND SKILL (Continued)	
14. Student shows increased mountaineering skills	
15. Student shows increased river rafting skills	
16. Student shows increased seamanship skills	

GENERAL QUESTIONS

A. Is there any obvious way in which this course could be changed in focus or emphasis to be more useful to the students?

B. Is there any obvious good effect that this course is having on the students that is not covered in the checklist?

C. Overall evaluation of the course instructor's effectiveness (one or two sentences)
In securing changes in attitudes and values:

In securing changes in Knowledge:

In securing changes in Physical Fitness and Skill:

Signed: _____ Date: _____

(Course Director)

Signed: _____

(Instructor)

APPENDIX C

INSTRUCTOR'S STUDENT EVALUATION CHECKLIST USED BY DARTMOUTH OUTWARD BOUND CENTER

- 1973 -

DARTMOUTH OUTWARD BOUND CENTER

Instructor's Student Evaluation Checklist

Student's Name_____ Course #_____

Date_____ Instructor's Name_____

This checklist is not intended as an evaluation of an individual student as such. It is intended that this form will serve to measure the effectiveness of the Outward Bound course in providing students with a chance to change and grow during their Outward Bound course. In completing this checklist it is worth keeping in mind that the results will be averaged to give us general trends -- we don't expect that every student will show progress in every area, we are interested in averaged trends for entire courses. Since we are concerned with changes in students that occur during the course, we have provided two columns, one should be completed on or around the third day of the course (or whenever the students are "settled down" and more or less acting normally) and the second column should be completed on or around the last day of the course. If you haven't been able to observe behavior that allows you to determine that any specific change has occurred, put a dash rather than a letter.

Put the appropriate number in the column opposite the criterion item.

0. Doesn't show this attitude or skill

1. Shows this attitude or skill infrequently

2. Shows this attitude or skill frequently

3. Shows this attitude or skill almost constantly

\- Have not been able to observe behavior

OBJECTIVES AND CRITERION ITEMS	End of 3 days	End of course
ATTITUDES AND VALUES		
1. Sense of Personal Worth and Self-Confidence		
1.1 Student willingly tries new experiences		
1.2 Student shares his feelings and experiences of the course		
1.3 Student seeks to make new friends		
1.4 Student can laugh at self		
1.5 Student participates in decision-making processes		
1.6 Student accepts leadership responsibility		
1.7 Student willingly admits own mistakes		
1.8 Student makes most of difficult situations		
1.9 Student guages physical abilities and limitations realistically		
1.10 Student is aware of emotional self		
1.11 Student cares for individual and group equipment		
2. Interpersonal Communication (one-to-one interactions)		
2.1 Student tries to resolve conflicts with others		
2.2 Student tries to speak honestly of his/her feelings		
2.3 Student spends time talking with others about things that deeply concern him/her		
2.4 Student willingly recognizes other's achievements		

OBJECTIVES AND CRITERION ITEMS	End of 3 days	End of course
3. Group Interaction Skills (crew, watch, or patrol interaction)		
3.1 Student accepts responsibility for daily appointed tasks		
3.2 Student helps other members for good of team		
3.3 Student allows others a chance to lead and student is a good follower		
3.4 Student has fun, laughs, smiles and generally shows he or she enjoys being part of the group		
4. Spiritual, Moral and Ethical Values		
4.1 Student speaks of spiritual, moral or ethical principles when trying to explain his action or persuade others of his point of view		
4.2 Student discusses situations within the perspective of universal or general human values		
4.3 Student shows empathy and compassion for others regardless of their sex, race or religion		
4.4 Student takes time to observe surroundings in a meditative or thoughtful way		
4.5 Student keeps a journal		
4.6 Student speaks (or writes in a journal) of the wilderness as a spiritual experience		
5. Environmental Awareness		
5.1 Student willingly practices personal hygiene in an environmentally acceptable manner		
5.2 Student willingly carries out everything he or she brought in		
5.3 Student willingly picks up other's litter so as to leave environment as natural as possible		

OBJECTIVES AND CRITERION ITEMS	End of 3 days	End of course
5. (Continued)		
5.4 Student speaks (or writes in journal) of interrelationships of man and nature		
5.5 Student shows a reverance for living things (by refraining from needless destruction of plant or animal life)		
KNOWLEDGE AND SKILLS		
6. Student shows knowledge of first aid and rescue		
7. Student shows knowledge of map and compass		
8. Student shows knowledge of wilderness environment (weather, ecology, geology, animal/plant life)		
9. Student shows knowledge of group interaction processes		
PHYSICAL FITNESS AND SKILL		
10. Student shows increased overall physical fitness		
11. Student shows increased skill in:		
a. camp selection		
b. shelter construction		
c. axemanship		
d. firebuilding		
e. care of equipment		
f. dynamics of keeping dry and warm		
g. backpacking		
h. snowshoeing		
i. light ski-touring		
j. ski expeditioning		

GENERAL QUESTIONS

A. Is there any very obvious way the Outward Bound Course improved this student's attitudes, knowledge or fitness that is not covered above?

B. Is there any very obvious way the Outward Bound Course failed this student? How could the course be improved to better serve this student?

C. Overall (1-2 sentences), evaluation of student.

Signed: _____ Date _____
(Instructor)

Signed: _____
(Student)

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